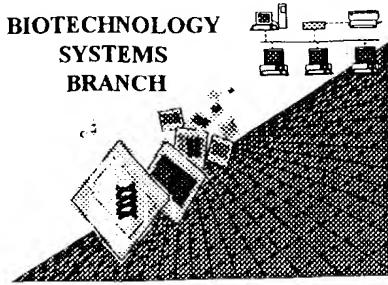


RAW SEQUENCE LISTING ERROR REPORT



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/774,809A

Source: O/R6

Date Processed by STIC: 8/13/2001

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) **INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
- 2) **TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO).

Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:

<http://www.uspto.gov/web/offices/pac/checker>

Raw Sequence Listing Error Summary

<u>ERROR DETECTED</u>	<u>SUGGESTED CORRECTION</u>	SERIAL NUMBER: <u>09/774,8194</u>
ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE		
1 <input type="checkbox"/> Wrapped Nucleic Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."	
2 <input type="checkbox"/> Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.	
3 <input type="checkbox"/> Misaligned Amino Numbering	The numbering under each 5 th amino acid is misaligned. Do not use tab codes between numbers; use space characters , instead.	
4 <input type="checkbox"/> Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.	
5 <input type="checkbox"/> Variable Length	Sequence(s) <input type="checkbox"/> contain n's or Xaa's representing more than one residue. Per Sequence Rules , each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.	
6 <input type="checkbox"/> PatentIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) <input type="checkbox"/> . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.	
7 <input type="checkbox"/> Skipped Sequences (OLD RULES)	Sequence(s) <input type="checkbox"/> missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped	
	Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.	
8 <input type="checkbox"/> Skipped Sequences (NEW RULES)	Sequence(s) <input type="checkbox"/> missing. If intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000	
9 <input type="checkbox"/> Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.	
10 <input type="checkbox"/> Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence	
11 <input checked="" type="checkbox"/> Use of <220>	Sequence(s) <u>118</u> missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)	
12 <input type="checkbox"/> PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.	
13 <input type="checkbox"/> Misuse of n	n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.	

OIPE

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/774,809A

DATE: 08/13/2001
TIME: 14:57:21

Input Set : A:\ES.txt
Output Set: N:\CRF3\08132001\I774809A.raw

157:21

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/774,809A

DATE: 08/13/2001
TIME: 14:57:21

Input Set : A:\ES.txt
Output Set: N:\CRF3\08132001\I774809A.raw

69 <220> FEATURE:
70 <223> OTHER INFORMATION: Synthetic Sequence
72 <400> SEQUENCE: 4
73 ctgtgctaaa ggagagggct 20
75 <210> SEQ ID NO: 5
76 <211> LENGTH: 20
77 <212> TYPE: DNA
78 <213> ORGANISM: Artificial Sequence
80 <220> FEATURE:
81 <223> OTHER INFORMATION: Synthetic Sequence
83 <400> SEQUENCE: 5
84 atgatggatg ctgagagcc 20
86 <210> SEQ ID NO: 6
87 <211> LENGTH: 20
88 <212> TYPE: DNA
89 <213> ORGANISM: Artificial Sequence
91 <220> FEATURE:
92 <223> OTHER INFORMATION: Synthetic Sequence
94 <400> SEQUENCE: 6
95 gttgacattt aagacacatc 20
97 <210> SEQ ID NO: 7
98 <211> LENGTH: 20
99 <212> TYPE: DNA
100 <213> ORGANISM: Artificial Sequence
102 <220> FEATURE:
103 <223> OTHER INFORMATION: Synthetic Sequence
105 <400> SEQUENCE: 7
106 ctgtatcaga ggc当地 20
108 <210> SEQ ID NO: 8
109 <211> LENGTH: 20
110 <212> TYPE: DNA
111 <213> ORGANISM: Artificial Sequence
113 <220> FEATURE:
114 <223> OTHER INFORMATION: Synthetic Sequence
116 <400> SEQUENCE: 8
117 tgctgttct agactgctgt 20
119 <210> SEQ ID NO: 9
120 <211> LENGTH: 20
121 <212> TYPE: DNA
122 <213> ORGANISM: Artificial Sequence
124 <220> FEATURE:
125 <223> OTHER INFORMATION: Synthetic Sequence
127 <400> SEQUENCE: 9
128 agtcatctac agcagccag 20
130 <210> SEQ ID NO: 10
131 <211> LENGTH: 20
132 <212> TYPE: DNA
133 <213> ORGANISM: Artificial Sequence
135 <220> FEATURE:

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/774,809A

DATE: 08/13/2001

TIME: 14:57:21

Input Set : A:\ES.txt

Output Set: N:\CRF3\08132001\I774809A.raw

136 <223> OTHER INFORMATION: Synthetic Sequence
138 <400> SEQUENCE: 10
139 ccatccctcc caccggccga 20
141 <210> SEQ ID NO: 11
142 <211> LENGTH: 20
143 <212> TYPE: DNA
144 <213> ORGANISM: Artificial Sequence
146 <220> FEATURE:
147 <223> OTHER INFORMATION: Synthetic Sequence
149 <400> SEQUENCE: 11
150 atcaatgact aaccgactcc 20
152 <210> SEQ ID NO: 12
153 <211> LENGTH: 20
154 <212> TYPE: DNA
155 <213> ORGANISM: Artificial Sequence
157 <220> FEATURE:
158 <223> OTHER INFORMATION: Synthetic Sequence
160 <400> SEQUENCE: 12
161 caaaataag accactgaat 20
163 <210> SEQ ID NO: 13
164 <211> LENGTH: 20
165 <212> TYPE: DNA
166 <213> ORGANISM: Artificial Sequence
168 <220> FEATURE:
169 <223> OTHER INFORMATION: Synthetic Sequence
171 <400> SEQUENCE: 13
172 cacgcttgct tctgctcatg 20
174 <210> SEQ ID NO: 14
175 <211> LENGTH: 20
176 <212> TYPE: DNA
177 <213> ORGANISM: Artificial Sequence
179 <220> FEATURE:
180 <223> OTHER INFORMATION: Synthetic Sequence
182 <400> SEQUENCE: 14
183 cggcttagct tcttgattgc 20
185 <210> SEQ ID NO: 15
186 <211> LENGTH: 20
187 <212> TYPE: DNA
188 <213> ORGANISM: Artificial Sequence
190 <220> FEATURE:
191 <223> OTHER INFORMATION: Synthetic Sequence
193 <400> SEQUENCE: 15
194 cccgcttggc atgagtcgt 20
196 <210> SEQ ID NO: 16
197 <211> LENGTH: 20
198 <212> TYPE: DNA
199 <213> ORGANISM: Artificial Sequence
201 <220> FEATURE:
202 <223> OTHER INFORMATION: Synthetic Sequence

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/774,809A

DATE: 08/13/2001

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Input Set : A:\ES.txt

Output Set: N:\CRF3\08132001\I774809A.raw

204 <400> SEQUENCE: 16
205 ctctctgttag gcccgcttgg 20
207 <210> SEQ ID NO: 17
208 <211> LENGTH: 20
209 <212> TYPE: DNA
210 <213> ORGANISM: Artificial Sequence
212 <220> FEATURE:
213 <223> OTHER INFORMATION: Synthetic Sequence
215 <400> SEQUENCE: 17
216 atttgcatcc atgagctcca 20
218 <210> SEQ ID NO: 18
219 <211> LENGTH: 20
220 <212> TYPE: DNA
221 <213> ORGANISM: Artificial Sequence
223 <220> FEATURE:
224 <223> OTHER INFORMATION: Synthetic Sequence
226 <400> SEQUENCE: 18
227 cgttccctgca gtcctggcca 20
229 <210> SEQ ID NO: 19
230 <211> LENGTH: 20
231 <212> TYPE: DNA
232 <213> ORGANISM: Artificial Sequence
234 <220> FEATURE:
235 <223> OTHER INFORMATION: Synthetic Sequence
237 <400> SEQUENCE: 19
238 ggatgacctc gggtgctctg 20
240 <210> SEQ ID NO: 20
241 <211> LENGTH: 20
242 <212> TYPE: DNA
243 <213> ORGANISM: Artificial Sequence
245 <220> FEATURE:
246 <223> OTHER INFORMATION: Synthetic Sequence
248 <400> SEQUENCE: 20
249 cccataatgc accccacaga 20
251 <210> SEQ ID NO: 21
252 <211> LENGTH: 20
253 <212> TYPE: DNA
254 <213> ORGANISM: Artificial Sequence
256 <220> FEATURE:
257 <223> OTHER INFORMATION: Synthetic Sequence
259 <400> SEQUENCE: 21
260 cgggtgttgg agagttcat 20
262 <210> SEQ ID NO: 22
263 <211> LENGTH: 20
264 <212> TYPE: DNA
265 <213> ORGANISM: Artificial Sequence
267 <220> FEATURE:
268 <223> OTHER INFORMATION: Synthetic Sequence
270 <400> SEQUENCE: 22

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/774,809A

DATE: 08/13/2001

TIME: 14:57:21

Input Set : A:\ES.txt
Output Set: N:\CRF3\08132001\I774809A.raw

271 tttgggtggtg gagcttctgc 20
273 <210> SEQ ID NO: 23
274 <211> LENGTH: 20
275 <212> TYPE: DNA
276 <213> ORGANISM: Artificial Sequence
278 <220> FEATURE:
279 <223> OTHER INFORMATION: Synthetic Sequence
281 <400> SEQUENCE: 23
282 ggctggccccc gtataactcc 20
284 <210> SEQ ID NO: 24
285 <211> LENGTH: 20
286 <212> TYPE: DNA
287 <213> ORGANISM: Artificial Sequence
289 <220> FEATURE:
290 <223> OTHER INFORMATION: Synthetic Sequence
292 <400> SEQUENCE: 24
293 tgctaaagga gagggctgcc 20
295 <210> SEQ ID NO: 25
296 <211> LENGTH: 20
297 <212> TYPE: DNA
298 <213> ORGANISM: Artificial Sequence
300 <220> FEATURE:
301 <223> OTHER INFORMATION: Synthetic Sequence
303 <400> SEQUENCE: 25
304 aggccaaagt cggatctgtt 20
306 <210> SEQ ID NO: 26
307 <211> LENGTH: 20
308 <212> TYPE: DNA
309 <213> ORGANISM: Artificial Sequence
311 <220> FEATURE:
312 <223> OTHER INFORMATION: Synthetic Sequence
314 <400> SEQUENCE: 26
315 ccaccccccgtatggccaaag 20
317 <210> SEQ ID NO: 27
318 <211> LENGTH: 20
319 <212> TYPE: DNA
320 <213> ORGANISM: Artificial Sequence
322 <220> FEATURE:
323 <223> OTHER INFORMATION: Synthetic Sequence
325 <400> SEQUENCE: 27
326 ccaaqcgggc ctacagagag 20
328 <210> SEQ ID NO: 28
329 <211> LENGTH: 20
330 <212> TYPE: DNA
331 <213> ORGANISM: Artificial Sequence
333 <220> FEATURE:
334 <223> OTHER INFORMATION: Synthetic Sequence
336 <400> SEQUENCE: 28
337 ctttccgttg gacccctgg 20

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<210> 75
<211> 60
<212> DNA
<213> Homo sapiens

<300>
<308> L31951 Genbank
<309> 1994-12-06
<313> FROM 689 TO 748

<300>
<308> U34821 Genbank
<309> 1996-07-~~26~~ *delete spaces*
<313> FROM 675 TO 734

10 Splices
11
1996-07-26

same ends: Seg. 76, 79-80

09/774,809A

2

```
<210>    118
        <211>    20
        <212>    DNA
        <213>    Artificial Sequence
        <400>    118
        tcgttcctgc agtccttgcc
```

see den Hom Error Summary Sheet

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VERIFICATION SUMMARY
PATENT APPLICATION: **US/09/774,809A**

DATE: 08/13/2001
TIME: 14:57:22

Input Set : **A:\ES.txt**
Output Set: **N:\CRF3\08132001\I774809A.raw**

L:766 M:283 W: Missing Blank Line separator, <400> field identifier
L:880 M:283 W: Missing Blank Line separator, <400> field identifier
L:895 M:286 W: Invalid Database Entry: Valid Formats YYYY-MM-DD or Mon-YYYY, SEQ ID:75
L:907 M:283 W: Missing Blank Line separator, <300> field identifier
L:914 M:286 W: Invalid Database Entry: Valid Formats YYYY-MM-DD or Mon-YYYY, SEQ ID:76
L:952 M:286 W: Invalid Database Entry: Valid Formats YYYY-MM-DD or Mon-YYYY, SEQ ID:79
L:975 M:286 W: Invalid Database Entry: Valid Formats YYYY-MM-DD or Mon-YYYY, SEQ ID:80
L:1132 M:283 W: Missing Blank Line separator, <220> field identifier
L:1396 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:1396 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:1886 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:162
L:1902 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:163